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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/675,607

09/29/2003

Takashi Sano

03584/LH

6344

1933

7590

12/14/2004

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EXAMINER

LE, HOANGANH T

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/675,607	Applicant(s) SANO, TAKASHI	
	Examiner HoangAnh T Le	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 9-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2, and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al (the JP Patent No. 2001-337181, cited by Applicant) in view of Yahata et al (the Pub. No. 2003/0107523 A1).

The Endo et al reference teaches in figure 1 an antenna comprising: a core material, both end portions of the core material being widened in a thickness direction; and a coil which is wound around the core material. The antenna receives a long wave (figure 3). The antenna receives an electric wave that includes a time data (figure 3). The antenna is contained a case of a wristwatch (figure 3). Figure 4 shows a core material case around the coil. Endo et al do not teach the core material being formed by laminating a plurality of thin plates made of a magnetic material.

The Yahata et al reference teaches in the abstract a core material being formed by laminating a plurality of thin plates made of a magnetic material and the magnetic

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material comprising amorphous in order to prevent a loss due to eddy current (page 1, parag. [0002]).

Since one of ordinary skill in the art would recognize the benefit of preventing a loss due to eddy current, it would have been obvious to provide Endo et al with the core material being formed by laminating a plurality of thin plates made of amorphous as taught by Yahata et al.

4. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (the JP Patent No. 2001-337181, cited by Applicant) in view of Matsushita (the US Patent No. 5,220,339).

The Endo et al reference teaches in figure 1 an antenna comprising: a core material, both end portions of the core material being widened from a center of the core material; and a coil which is wound around the core material. The antenna receives a long wave (figure 3). The antenna receives an electric wave that includes a time data (figure 3). Endo et al do not teach the core material being formed by binding a plurality of wire rods made of a magnetic material and the magnetic material comprising amorphous.

The Matsushita reference teaches in figure 3 a core material being formed by binding a plurality of wire rods made of a magnetic material and the magnetic material comprising amorphous in order to improve the performance of the antenna (col. 1, lines 56-59).

Since one of ordinary skill in the art would recognize the benefit of improving the performance of the antenna, it would have been obvious to provide Endo et al with the

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core material being formed by binding a plurality of wire rods made of amorphous as taught by Matsushita.

Allowable Subject Matter

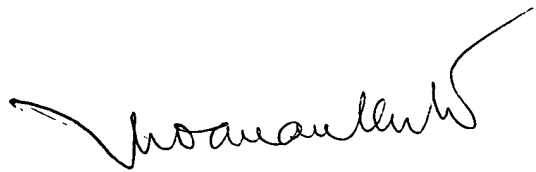
5. Claims 19-20 are allowed.
6. Claims 3,4 and 9-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter: none of the cited art discloses that a spacer is provided between a plurality of the thin plates at the both end portions of the core material or the end portions of the thin plates are bent in the thickness direction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hoanganh Le', with a stylized flourish extending from the end.

Hoanganh Le
Primary Examiner